IN THE CLAIMS

Please amend claims 21, 22, 24, 25, 27, and 29, and cancel claim 23 as follows:

1-20. (CANCELED).

21. (CURRENTLY AMENDED) An on-vehicle sound-amplification apparatus, comprising:

a dipole sound source provided in a vicinity of a position of a passenger wherein at least one acoustic radiation axis thereof is directed outwardly from a vehicle interior; and

signal processing means for amplifying an acoustic signal and then inputting an output thereof to the dipole sound source, wherein

the dipole sound source includes at least two loudspeakers wherein the at least two loudspeakers are arranged so that respective acoustic radiation planes thereof are directed opposite to each other; and

the signal processing means variably controls a phase of an input to at least one of the loudspeakers included in the dipole sound source.

~~wherein the on-vehicle sound-amplification apparatus is located outside the vehicle interior.~~

22. (CURRENTLY AMENDED) An on-vehicle sound-amplification apparatus, comprising: ~~according to claim 21, further comprising:~~

a dipole sound source provided in a vicinity of a position of a passenger wherein at least one acoustic radiation axis thereof is directed outwardly from a vehicle interior;

signal processing means for amplifying an acoustic signal and then inputting an output thereof to the dipole sound source; and

a non-directional sound source provided in a vicinity of a center of the dipole sound source wherein an acoustic radiation thereof is driven to have an

inverted phase from that of the acoustic radiation of the dipole sound source which is directed into the vehicle interior, wherein

the output from the signal processing means is also input to the non-directional sound source~~, and~~

~~wherein the combination of the dipole sound source, the non-directional sound source and the signal processing circuit produce a radiated sound where substantially no direct sound reaches a location in the vicinity of a position of a passenger~~.

23. (CANCELED).

24. (CURRENTLY AMENDED) An on-vehicle sound-amplification apparatus according to claim 21 ~~23~~, wherein: each of the at least two loudspeakers included in the dipole sound source has an acoustic tube whose cross-sectional area along a direction perpendicular to a sound wave traveling direction varies continuously; the acoustic tubes of the respective loudspeakers are arranged so that respective acoustic radiation planes thereof are directed opposite to each other; and a radiated sound from the loudspeaker which is driven by an output from the signal processing means is radiated by being guided along the acoustic tube.

25. (CURRENTLY AMENDED) An on-vehicle sound-amplification apparatus according to claim 21 ~~23~~, the signal processing means comprising:

a radiation sound detector provided in a vicinity of a first one of the at least two loudspeakers included in the dipole sound source;

an error detector provided in a vicinity of a second one of the loudspeakers included in the dipole sound source;

an adder for adding together respective outputs from the radiated sound detector and the error detector; and

calculation means for receiving the acoustic signal and the output from the adder, performing a calculation so that the output from the adder is small, and

inputting the obtained result to the second loudspeaker located in the vicinity of the error detector, wherein

the acoustic signal is input to the first loudspeaker located in the vicinity of the radiated sound detector.

26. (ORIGINAL) An on-vehicle sound-amplification apparatus according to claim 25, the calculation means comprising:

an adaptive filter for receiving the acoustic signal;

a filter for receiving the acoustic signal; and

a coefficient updator for receiving the output from the adder and an output from the filter, wherein:

an output from the adaptive filter is input to the second loudspeaker located in the vicinity of the error detector;

the coefficient updator updates a coefficient of the adaptive filter by performing a calculation so that the output from the adder is small; and

the filter has a characteristic equal to a transfer function from the error detector to the second loudspeaker located in the vicinity of the error detector.

27. (CURRENTLY AMENDED) An on-vehicle sound-amplification apparatus according to claim 21 ~~23~~, the signal processing means comprising:

a radiated sound detector arranged in a vicinity of a first one of the at least two loudspeakers included in the dipole sound source;

a first error detector arranged in a vicinity of a second one of the loudspeakers included in the dipole sound source;

a second error detector arranged in a vicinity of the non-directional sound source;

signal correction means for receiving an output from the second error detector;

a first adder for adding together an output from the radiation sound detector and an output from the first error detector;

a second adder for adding together the output from the first error detector and an output from the signal correction means;

first calculation means for receiving the acoustic signal and an output signal from the first adder, and performing a calculation so that the output signal from the first adder is small, wherein an output therefrom is input to the second loudspeaker located in the vicinity of the first error detector; and

second calculation means for receiving the acoustic signal and an output signal from the second adder, and performing a calculation so that the output signal from the second adder is small, wherein an output therefrom is input to the non-directional sound source, wherein

the acoustic signal is input to the first loudspeaker located in the vicinity of the radiation sound detector.

28. (ORIGINAL) An on-vehicle sound-amplification apparatus according to claim 27, the first calculation means comprising:

a first adaptive filter for receiving the acoustic signal;

a first filter for receiving the acoustic signal; and

a first coefficient updator for receiving the output from the first adder and an output from the first filter, wherein:

an output from the first adaptive filter is input to the second loudspeaker located in the vicinity of the first error detector;

the first coefficient updator updates a coefficient of the first adaptive filter by performing a calculation so that the output from the first adder is small; and

the first filter has a characteristic equal to a transfer function from the first error detector to the second loudspeaker located in the vicinity of the first error detector, the second calculation means comprising:

a second adaptive filter for receiving the acoustic signal;

a second filter for receiving the acoustic signal; and

a second coefficient updator for receiving the output from the second adder and an output from the second filter, wherein:

an output from the second adaptive filter is input to the non-directional sound source;

the second coefficient updator updates a coefficient of the second adaptive filter by performing a calculation so that the output from the second adder is small; and

the second filter has a characteristic equal to a transfer function from the second error detector to the non-directional sound source.

29. (CURRENTLY AMENDED) An on-vehicle sound-amplification apparatus according to claim 24, wherein the acoustic tube of each of the at least two loudspeakers included in the dipole sound source is formed of a sound path having a ~~desired~~ bent shape.

30. (ORIGINAL) An on-vehicle sound-amplification apparatus according to claim 29, wherein the at least two loudspeakers included in the dipole sound source are arranged so that an interval between the respective acoustic radiation planes included in the acoustic tubes of the loudspeakers is less than or equal to approximately 1/2 of the wavelength of the reproduced sound.

31. (CANCELED).

32. (CANCELED).

33. (ORIGINAL) An on-vehicle sound-amplification apparatus according to claim 21, the dipole sound source comprising an amplified sound source for radiating an amplified sound and a control sound source for radiating a control sound, wherein

an acoustic radiation plane of the amplification-sound source and an acoustic radiation plane of the control sound source are placed such that a difference between a phase of the amplified sound and a phase of the control sound at a desired frequency is substantially within 90° in a direction along a main axis of acoustic radiation of the amplified sound.